

REMARKS

The Official Action mailed April 8, 2002 has been received and its contents carefully noted. Filed concurrently herewith is a *Request for One Month Extension of Time* which extends the shortened statutory period for response to August 8, 2002. Accordingly, Applicant respectfully submits that this response is being timely filed.

Applicant notes with appreciation the consideration of the Information Disclosure Statement filed on August 30, 1999, April 26, 2001 and March 5, 2002. Applicants, however, have not received acknowledgment of the Information Disclosure Statement filed on April 12, 2002. It is respectfully requested that the Examiner provide a copy of the initialed Form PTO-1449 evidencing consideration of this Information Disclosure Statement.

Claims 7-26 are pending in the present application, of which claims 7, 11, 15, 19 and 23 are independent. Claims 7, 10-12, 15-16, 19-20 and 23-24 have been amended herewith to recite a reflection type liquid crystal panel and to recite that light is introduced into said panel from a side of a counter substrate of the panel. For the reasons set forth in detail below, these claims are believed to be in condition for allowance.

Paragraph 3 of the Official Action rejects claims 7-10 under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Specifically, the Official Action asserts that the specification does not disclose a reflection plate located adjacent to the liquid crystal panel with the light source interposed therebetween. In response, with reference to Figure 4(B), it is noted that a LED light source 31 comprises a reflective plate 34 and LED lamps 33. As shown in Figure 4(A) and Figure 5(A), the LED light source 31, which includes the structure shown in Figure 4(B), for example, is located on a side of a reflection type LCD panel. Accordingly, Applicants believe that the specification clearly discloses that a reflection plate is located adjacent to the liquid crystal panel with the light emitting diodes interposed therebetween, and the light emitting diodes and the reflection plate are arranged horizontally with respect to the liquid crystal panel such that one of skill in the art would have been enabled to make

and use the present invention. Reconsideration in view of the above remarks is requested.

Paragraph 5 of the Official Action rejects claims 11-14 and 19-22 as being obvious based on the combination of U.S. Patent 5,896,119 to Evanicky et al. and U.S. Patent 5,953,469 to Zhou. Paragraph 17 of the Official Action further rejects claims 23-26 based on this combination of Evanicky and Zhou. The Official Action asserts that Evanicky teaches all of the claimed limitations except for each of the light emitting diode lamps comprising R, G, and B LEDs. Zhou is cited by the Official Action to show this feature.

As stated in MPEP § 2143-2143.01, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." *In re Kotzab*, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

It is noted that Evanicky discloses an LCD panel having a transparent LCD screen. Moreover, although Zhou teaches an embedded mirror reflector, such mirror reflector does not correspond to a pixel electrode connected to a thin film transistor on an active matrix substrate as claimed. Thus, it is respectfully submitted that the combination of Evanicky and Zhou fails to disclose or suggest all the claim limitations as required to maintain a *prima facie* case of obviousness and favorable reconsideration is requested.


Paragraph 9 of the Official Action rejects claims 14 and 22 as obvious based on the combination of Evanicky, Zhou and U.S. Patent 6,073,034 to Jacobsen et al. Paragraph 11 of the Official Action rejects claims 15-18 as being obvious based on the combination of Evanicky, Zhou and U.S. Patent 5,334,993 to Okajima et al. It is respectfully submitted that neither Jacobsen nor Okajima et al. overcome the deficiencies of Evanicky and Zhou and reconsideration is requested for the reasons set forth above.

Paragraph 23 of the Official Action rejects claims 11 and 19 as obvious based on Jacobsen. Paragraph 25 of the Official Action further rejects claim 15 as obvious based on the combination of Jacobsen and Okajima. Finally, paragraph 27 of the Official Action rejects claim 23 as obvious based on the combination of Jacobsen and Zhou.

However, Applicant notes Jacobsen fails to disclose that light emitted from each of the light sources is introduced into the panel from a side of said counter substrate. That is, since Jacobsen fails to disclose or suggest every feature of the claimed invention, it is submitted that a *prima facie* case of obviousness cannot be maintained. Furthermore, it is submitted that neither of Okajima nor Zhou do anything to overcome the deficiencies of Jacobsen. Favorable reconsideration is requested in view thereof.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact Applicant's undersigned attorney at the telephone number listed below.

Respectfully submitted,


Eric J. Robinson
Reg. No. 38,285

Robinson Intellectual Property Law Office, P.C.
PMB 955
21010 Southbank Street
Potomac Falls, Virginia 20165
(571) 434-6789



VERSION WITH MARKINGS TO SHOW CHANGES MADE

THE CLAIMS:

Please amend claims 7, 10-12, 15, 16, 19, 20, 23, and 24 as follows:

7. (Amended) An electronic device comprising:
 - a reflection type liquid crystal panel comprising an active matrix substrate and a counter substrate, said active matrix substrate having a plurality of thin film transistors and a plurality of pixel electrodes connected with the thin film transistors;
 - a light source comprising 3-color light emitting diodes for producing three primary colors for additive color mixing; and
 - a reflection plate located adjacent to the liquid crystal panel with the [light source] light emitting diodes interposed therebetween, said [light source] light emitting diodes and the reflection plate arranged horizontally with respect to the liquid crystal panel,
 - wherein [said while] white light emitted from the light source is introduced into said liquid crystal panel from [a side] sides of said counter substrate of said liquid crystal panel.
10. (Amended) A device according to claim 7 wherein said [liquid crystal panel is a reflection type display panel] pixel electrodes comprise metal material.
11. (Amended) An electronic device comprising:
 - a reflection type liquid crystal display panel comprising an active matrix substrate and a counter substrate, said active matrix substrate having a plurality of thin film transistors and a plurality of pixel electrodes connected with the thin film transistors; and
 - at least two light sources located on sides of the display panel in opposition to each other, each of light sources comprising a plurality of light emitting diode lamps,
 - wherein each of said light emitting diode lamps comprises a red light emitting diode, a blue light emitting diode, and a green light emitting diode, and

wherein light emitted from each of the light sources is introduced into the panel from a side of said counter substrate.

12. (Amended) A device according to claim 11 wherein said [liquid crystal panel is a reflection type display panel] pixel electrodes comprise metal material.

15. (Amended) An electronic device comprising:
a reflection type liquid crystal display panel comprising an active matrix substrate and a counter substrate, said active matrix substrate having a plurality of thin film transistors and a plurality of pixel electrodes connected with the thin film transistors;
and

at least two light sources located on sides of the display panel in opposition to each other, each of light sources comprising a plurality of light emitting diode lamps,

wherein each of said light emitting diode lamps comprises a red light emitting diode, a blue light emitting diode, and a green light emitting diode located on a substrate and coated with resin, and

wherein light emitted from each of the light sources is introduced into the panel from a side of said counter substrate.

16. (Amended) A device according to claim 15 wherein said [liquid crystal panel is a reflection type display panel] pixel electrodes comprise metal material.

19. (Amended) An electronic device comprising:
a reflection type liquid crystal display panel comprising an active matrix substrate and a counter substrate, said active matrix substrate having a plurality of thin film transistors and a plurality of pixel electrodes connected with the thin film transistors;
and

at least two light sources located on sides of the display panel in opposition to each other, each of light sources comprising a plurality of light emitting diode lamps ranged in line,

wherein each of said light emitting diode lamps comprises a red light emitting diode, a blue light emitting diode, and a green light emitting diode, and wherein light emitted from each of the light sources is introduced into the panel from a side of said counter substrate.

20. (Amended) A device according to claim 19 wherein said [liquid crystal panel is a reflection type display panel] pixel electrodes comprise metal material.

23. (Amended) An electronic device comprising:
a reflection type liquid crystal display panel comprising an active matrix substrate and a counter substrate, said active matrix substrate having a plurality of thin film transistors and a plurality of pixel electrodes connected with the thin film transistors; and

at least two light sources located on sides of the display panel in opposition to each other, each of light sources comprising a plurality of light emitting diode lamps,

wherein each of said light emitting diode lamps comprises a red light emitting diode, a blue light emitting diode, and a green light emitting diode,

wherein light emitted from each of the light sources is introduced into the panel from a side of said counter substrate, and

wherein said counter substrate has a plurality of inclined surfaces on an opposite side of the active matrix substrate.

24. (Amended) A device according to claim 23 wherein said [liquid crystal panel is a reflection type display panel] pixel electrodes comprise metal material.